Question: 30 - Existing Exterior MV Switchgear
Regarding the existing Exterior MV Switchgear, I understand that the prebid tour did not allow viewing of this unit. The work and modifications to this switchgear as shown on EP201 and 202 are critical to the complete functionality of this project and there is minimal info available on this unit. The parts/pieces and means/methods to accomplish what is being called for is potentially very expensive and cannot be priced w/o more info.

a. What is the make/mfgr of this unit? Are there shop drawings existing and available for this unit? If so, can you publish as part of the bid docs? Have any pictures been taken, or could you take pictures, and make them available?

b. Has Van Zelm done the necessary field research and engineering to determine that the modifications shown are feasible? If so, please provide more info, detail, and specification for the PT's CT's, mounting means and the relays required? Please provide part #s for the equipment.

c. If response to question b above is ***NO***, and this portion of the work is to essentially be "design-build", then we will require a bid extension and another (private) site visit with field service engineers to determine the feasibility and the necessary equipment.

Answer: The manufacturer of the MV switchgear feeder protection is Shallbetter, SO 45540 (10/93). The manufacturer of the tie breaker control circuit is RD Brock Engineering, JN 94-0149. Shop drawings and photos are available, and will be provided to the successful bidder. New component installation shall follow the requirements for utility grade metering. A private site visit will not be permitted.

Question: 31 - Reference note 9 on E201, note F on E201, and note 1 on ES100.
Reference note 9 on E201, note F on E201, and note 1 on ES100.

a. The 5KV cable is specified in 260513, but there is no indication of what size cable is desired. Please advise what cable size is required?

b. The 1-lines on E201 show the 5KV feeder from a "pad mounted tap compartment" to the transformer. ES100 shows the feeder from a MH to the transformer. Where is the "pad mounted tap compartment"? Is the manhole that the feeder comes from on ES100 the M.H. E4 that is called out on E201?

c. Pending the response to question b above, would it be possible to pull the existing 5KV cable back past the new T-pad, break into the existing ductbank (as noted), pull existing cable into the new pad, apply new loadbreaks and plug onto new transformer? This will avoid completely removing existing cable, pulling all new cable, and another set of loadbreaks.

Answer: Cable size shall be 3 #1/0 AWG, and 1 #6 G. See response to Question 14. MV work is to replace feeder from MH E4 (same MH on ES100 and E201) to new transformer. Removal of the existing MV cable will be from existing transformer to MH E4 (not the pad mount tap compartment). MV work shall be based on pulling new cable as shown on the drawings and not re-using the existing cable to the new transformer.

Question: 32 - Reference note 4 on E201.
Reference note 4 on E201. I have been informed that PM870 meter does not have wireless capability. Please provide more info on how the meters are connected and integrated?

Answer: VA is standardizing on power meters with wireless capability manufactured by Schneider in the Square D PM870 series. A power meter with wireless functionality is required.

Question: 33 - Reference EP202.
Reference EP202. The is a switchboard named GDP; GDP is not indicated anywhere else. I assume that this GDP is the CHDP; please confirm?

Answer: Panel GDP on Drawing EP202 should be labeled CHDP.

Question: 34 - Reference EP202.
Reference EP202. Please specify the cabling method, cable type, or communication protocol for the 52G trip circuit. Please note that this circuit is nearly 1000' long.

Answer: See response to Question 17.

Question: 35 - Reference E502 and the new transformer pad detail.
Reference E502 and the new transformer pad detail. This detail shows 2 magnesium anodes. There is no spec for these in 260526. Please advise on volume or size that is desired. This is not a typical requirement.

Answer: Magnesium anodes are not required. However, provide empty conduit for future provisions.

Question: 36 - Spec Section 260913
262411-2.6 says to refer to 260913 for power monitoring. This section does not exist. Please advise.

Answer: See response to Question 32.

Question: 37 - General electrical note N on E000
General electrical note N on E000 says to use NetCom. Please provide contact info for this company. Internet search for this is not useful.

Answer: New utility fiber and telephone cables are not required under this phase of work.

Question: 38 - General Note E on ES100
General Note E on ES100 calls for us to include Utility Co fees. Utility fees are generally paid direct by owner or an allowance is stipulated as part of the bid. The Utility companies are generally unable to produce a value for their work at bid time.

a**.** Please advise if an allowance can be created to cover this?

b. Will the Utility Co even be needed to do the shutdowns as it appears to be a private primary loop? Can you provide a 1-line for the campus power system?

Answer: Contractor is not responsible for Utility fees. Contractor will be required to coordinate and schedule outages with Utility for interface with existing MV Switchgear.